

mental health AIDS

A Quarterly Update from the Center for Mental Health Services (CMHS) of the Substance Abuse and Mental Health Services Administration (SAMHSA) Volume 8, Issue 2 – Winter 2007

Biopsychosocial Update

HIV Prevention News

About Women

Witte et al. (2006) randomly assigned "217 women and their main male sexual partners ... to one of three study conditions: a six-session relationship-based STD [sexually transmitted disease] prevention intervention provided to the couple together, the same intervention provided to the woman only[,] or a single-session education control provided to the woman only" (p. 148). Study participants' use of the female condom was assessed at baseline and again 3 months following the intervention. According to Witte and colleagues, "[d]uring follow-up, participants in either active intervention were more likely to use a female condom with their study partner and with all partners, and used female condoms at a higher rate with all partners, than individuals assigned to the control intervention; at the end of three months, they were more likely to intend to use the condom in the next 90 days. No significant differences in outcomes were found between the active intervention groups" (p. 148). The investigators conclude that this study demonstrated "the efficacy of a **relationship-based intervention at promoting female condom use** among long-term heterosexual couples The findings for the women-only group are consistent with results of other female condom intervention trials targeting women individually. ... The finding that both

active interventions increased female condom use and use intentions add to the literature by offering two efficacious methods for promoting the device, one of which incorporates a woman's main male sexual partner" (p. 152).

About Men

Wolitski and the Project START Writing Group (2006) compared the effects of a single-session intervention and an enhanced multisession intervention on sexual risk behavior reported by **young men** (ages 18 to 29 years) **released from U.S. prisons** in four states. The men were systematically assigned to one of these two intervention conditions.¹

¹ "Both interventions incorporated features of prevention case management, ... motivational interviewing, ... and harm reduction. ... The single-session intervention was based on a brief HIV-risk assessment and risk-reduction planning intervention for incarcerated men. ... It consisted of a 60- to 90-minute individual session that was conducted approximately 2 weeks before release. The interventionist assessed the participant's HIV/AIDS, hepatitis, and STI [sexually transmitted infection] knowledge and risk behavior and helped the participant develop a personal risk-reduction plan. The interventionist provided information, skills training, and referrals as required and worked with the participant to identify incremental steps toward risk reduction. The enhanced intervention consisted of 2 scheduled individual sessions before release and 4 scheduled sessions at 1, 3, 6, and 12 weeks after release. The first in-prison session was the same as the single-session intervention. The second in-prison session focused on community reentry needs and included assessment, planning, and problem solving, and facilitated referral for housing, employment, financial problems, social

Assessment data were collected prior to release, as well as 1, 12, and 24 weeks following release. "A total of 522 men were included in intent-to-treat analyses. Follow-up rates ranged from 76% to 87%. Unprotected vaginal or anal sex during the 90 days before incarceration was reported by 86% of men in the enhanced intervention and 89% in the single-session intervention At 24 weeks [after release], 68% of men assigned to the enhanced intervention reported unprotected vaginal or anal sex compared with 78% of those assigned to the single-session intervention ..." (p. 1854). According to the investigators,

relationships, substance abuse and mental health treatment, legal problems, and avoiding reincarceration. The postrelease sessions involved review and updating of the plan developed during previous sessions, including discussion of facilitators of and barriers to implementing the risk-reduction plan. In-prison sessions lasted 60 to 90 minutes; the postrelease sessions were 30 to 60 minutes. Additional sessions were offered to enhanced intervention participants as needed during the intervention period" (p. 1855).

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Project START demonstrated that a multisession community-reentry intervention can lead to lower rates of sexual risk behavior among young men who are released from prison. Significantly lower rates of unprotected intercourse were observed at 24 weeks for men assigned to the enhanced intervention compared with those assigned to the single-session intervention. These differences continued to be present even when differences in the amount of time since the last intervention contact were taken into account. This success is noteworthy given the difficulties inherent in working in correctional settings, including restricted access to participants, limited private space, negative attitudes toward prevention activities among some correctional staff, and restrictions on HIV-prevention materials in prison. ... (p. 1858)

Wolitski and colleagues conclude that “[t]he enhanced intervention tested in Project START provides an evidence-based strategy for reducing sexual risk and should be considered for use with other young men in correctional settings. Given the disproportionate burden of disease in this population, ... health departments and community-based organizations [need] to work with correctional institutions to improve the health of these men, their partners, and their communities” (p. 1859).

About Men Who Have Sex With Men

Rosario, Schrimshaw, and Hunter (2006) interviewed an ethnically diverse sample of 80 **young gay and bisexual men** in New York City on three occasions (baseline, 6 months, 12 months). “As hypothesized, more negative attitudes toward homosexuality, more substance abuse symptoms, and poorer intentions for safer sex were directly associated with a greater likelihood of unprotected anal sex over the following year. Furthermore, lower self-esteem, more anxious symptoms, and childhood sexual abuse were related to more unprotected anal sex indirectly through more sexual partners, sexual encounters, and substance abuse symptoms” (p. 444). Rosario and colleagues point out that “interventions to address sexual risk behaviors must also address the mental health and substance abuse concerns of this population. ... [These] data suggest that by addressing the self-esteem and [negative] attitudes toward homosexuality ... of young gay and bisexual men, interventions may indirectly serve to improve the youths’ mental health and reduce their subsequent sexual risk behaviors” (p. 456). Additionally, “[p]sychotherapeutic interventions directly targeting gay and bisexual men with a history of childhood sexual abuse may be needed to address the long-term impact of this abuse on sexual risk behaviors” (p. 457).

Guzman et al. (2006) analyzed survey data from a diverse sample of 199 San Francisco men who have sex with men who knew their HIV status (130 [65%] were HIV-positive, 69 [35%] were HIV-negative), were familiar with the term “viral load,” and had a serodiscordant sex partner in the preceding year. “A majority ($n = 111$, 56%) **discussed [viral load]** in the prior year **with serodiscordant partners specifically to guide decisions about sexual risk behaviour**. Discussion was more common among HIV-positive than HIV-negative participants ... , and African Americans compared to whites HIV-negative men who discussed [viral load] were more concerned about becoming infected, but also more willing to engage in risky behaviour with a partner whose [viral load] is undetectable, than men not discussing [viral load]” (p. 983). The investigators suggest that “[s]ome HIV-negative men may be discussing [viral load] to engage in higher risk behaviour upon learning of an HIV-positive partner’s undetectable [viral load]” (p. 983). For this reason, Guzman and colleagues urge clinicians “to inquire with ... clients about their knowledge and beliefs related to [viral load] and transmission risk. It is important to correct any misconceptions and acknowledge that data generally ... [suggest] that HIV is relatively less transmissible when one’s blood viral load is low or undetectable ... [.] However, providers must also explain that using condoms for anal sex in the setting of an undetectable [viral load] is likely to further diminish risk of HIV transmission as well as lower risk for other sexually transmitted infections [STIs]” (p. 987).

About Women & Men

Continuing with this theme, Kalichman et al. (2006) “examined the association between **HIV treatment beliefs**, HIV transmission risk perceptions, medication adherence, viral load **and** engaging in **unpro-**

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tected intercourse with any sex partners and specifically with sex partners who were not HIV positive (non-concordant)” (p. 401) among a convenience sample of 158 men and women living with HIV/AIDS and engaged in treatment. According to the investigators,

the pattern of associations ... suggests that beliefs that HIV treatments and having an undetectable viral load protect against HIV transmission were consistently and primarily related to increased likelihood of engaging in HIV transmission risk behaviors with non-concordant partners. These findings suggest that HIV transmission risk behavior may be disinhibited by beliefs that HIV treatments reduce HIV transmission regardless of one’s own viral load and treatment adherence. ... [Moreover,] the context of a sex partner’s HIV status is essential to consider when examining the associations of HIV treatment, adherence, and treatment beliefs in relation to sexual risk behaviors of people living with HIV/AIDS. (p. 408)

With regard to the transmission risk inherent in these beliefs, Kalichman and colleagues pointedly observe that

[a]lthough having an undetectable viral load likely does reduce the infectiousness of some people living with HIV, the ... viral load in blood plasma may [be lower than the] ... viral load in genital secretions. Factors such as adherence itself as well as individual variations in immune system functioning create considerable uncertainty about how viral load may be related to HIV transmission risks. Perhaps most critical are [STIs] and other sources of urethritis[,] which can cause significant viral shedding in the genital tract without affect-

ing blood plasma viral load Interventions for reducing HIV transmission risk among people living with HIV should at minimum inform individuals of what is known as well as what remains unknown about these complicated associations. (pp. 408-409)

Duru et al. (2006) examined potential correlates of **sex without sero-status disclosure** in a stratified random sample of 875 men and women within a nationally representative sample of 2,864 adults receiving HIV medical care in 1996. “Compared with marriage and/or primary same-sex ... [relationships], occasional partnerships and one-time encounters ... were more likely to involve sex without disclosure. Knowledge of partner ... [sero-status] was also associated with sex without disclosure. Women were less likely to have sex without disclosure than men having sex with men” (p. 495). Importantly, the investigators identified

an association between a perceived responsibility to disclose to every partner and lower rates of sex without disclosure. ... The linking of disclosure and safer sex with a strong sense of individual responsibility may help inform the design of “prevention for positives” programs targeting those already infected. ... To the extent that prosocial motives, particularly perceived responsibility, are modifiable, identifying and including within such programs strategies to instill and nurture the ideas of responsibility to others might reduce rates of sex without disclosure of HIV-positive status. (p. 504)

About Adolescents & Young Adults

Lescano et al. (2006) examined the **condom use attitudes and behaviors** of 1,316 sexually active adolescents between the ages of 15 and 21 years residing in Providence,

Rhode Island; Atlanta, Georgia; and Miami, Florida. Data were obtained through audio computer-assisted self-interview.

Participants were divided into two groups: the 65% who reported main partners only (MP group) and the 35% who had at least one casual partner (CP group). Adolescents in the MP group were more likely to be female, whereas males were significantly more likely to report casual partners. Race/ethnicity, age, education level, household income, and ... STI ... history were unrelated to group status (i.e., sexual partner type). Greater substance use and riskier attitudes were reported by teens in the CP group. The number of unprotected sex acts in the past 90 days was substantial and equivalent between the main and casual partner groups (19.2 vs. 21.5, respectively). Regression analyses revealed that perceptions of main partner attitudes toward condom use and condom use expectations were significantly related to condom use with [main partners], but that attitudes were not related to condom use with [casual partners]. (p. 443.e1)

Noting the comparable number of unprotected sex acts in both groups, the investigators reflect that “[p]erhaps adolescents overestimate the safety of using condoms ‘most of the time’ with a casual partner and underestimate the risk of unprotected sex with a ‘serious’ partner. These sets of perceptions can have different determinants, but result in a similar relative health risk” (p. 443.e6).

For these reasons, Lescano and colleagues suggest that

[c]linicians ... emphasize the need for consistent condom use with all partners regardless of the patient’s feelings about the part-

ner, the sense of commitment, or the length of the relationship. Substantial risk for [STIs] and unintended pregnancies exist[s] with partners of all types, and emphasizing this risk may motivate some teens to use condoms consistently. Perception of main partners' attitudes about condom use was found to be important in determining consistent condom use, so reminding teens that most partners approve of condoms and that their use can contribute to mutual safety may be a useful strategy. (p. 443.e6)

In another paper from the same study group, Brown et al. (2006) examined data from a subsample of 415 African American adolescents from Providence and Atlanta and found that "[t]he odds that **African American adolescents** who reported **depressive symptoms** at baseline would report inconsistent condom use at six-month follow-up was approximately four times greater than that of their peers who did not report depressive symptoms. Older adolescents and females were less likely to use condoms consistently and certain contextual factors, such as less pleasurable expectations about condom use, and living with a partner also heightened HIV/STI risk" (p. 444.e1).

These results strongly suggest that clinicians should assess for depressive symptoms in African American adolescent patients as an indicator of sexual risk behavior. Likewise, ... providers should screen for depressive symptoms among any adolescents who report having engaged in sexual risk behaviors or have acquired ... [an STI]. Assessing depressive symptoms and intervening early can not only help prevent more severe emotional disorders from developing, but also help prevent the spread of HIV and STIs among adolescents.

HIV/STI prevention interventions may need to consider the role of depressive symptoms or emotional distress in preventing sexual risk. Standard skills-based programs may be less efficacious with depressed adolescents than their peers. Activities that address depressive symptoms could have a significant impact on later HIV/STI sexual risk behaviors. Teens with depressive symptoms may need additional strategies to improve their psychological adaptation to use condoms or to discuss condom use with partners. ... [These] findings suggest that addressing these issues can have long-term implications for adolescent health. (pp. 444.e6-444.e7)

Drawing data from a nationally representative probability sample of 18,922 adolescents, Waller et al. (2006) found that,

[c]ompared to abstinence, involvement in common **adolescent risk behaviors** (drinking, smoking, and sexual intercourse) was associated with increased odds of **depressive symptoms** in both sexes. However, sex differences in depressive symptoms vary by risk behavior pattern. There were no differences in odds for depressive symptoms between abstaining male and female adolescents There were also few sex differences in odds of depressive symptoms within the highest-risk behavior profiles. Among adolescents showing light and moderate risk behavior patterns, females experienced significantly more depressive symptoms than males. (p. 139)

Waller and colleagues note that

[m]any professional organizations recommend that adolescents be regularly screened for risk behaviors [These] find-

ings generally support this comprehensive screening strategy for risk behaviors and highlight the importance of thoroughly screening for depressive symptomatology among adolescents who match high-risk profiles. However, at this time, the U.S. Preventative Services Task Force has argued that there is insufficient evidence for screening for depression among asymptomatic adolescents We suggest that the findings from this study indicate that substance use and sexual activity should constitute "symptoms" for depression and that those who screen positively for involvement in experimental risk behavior should also be screened for depression. (p. 147)

Mustanski, Donenberg, and Emerson (2006) assessed sexual risk taking on two occasions, 6 months apart, among 175 ethnically diverse, urban **adolescents seeking outpatient mental health services**. The investigators found that

Motivation was the most important predictor of sexual risk taking at baseline, as well as in the longitudinal analyses. Information and Behavioral Skills showed little relationship to sexual risk behavior in this population. Indeed, teens know how to use condoms and believe they can use them, but they do not, especially when they are emotionally aroused. These results highlight the importance of addressing Motivation, and specifically behavioral intentions, in interventions to reduce HIV and STI[s] ... among youths with mental health problems. (p. 761)

Mustanski and colleagues encourage clinicians to "work with teens to develop safety plans by anticipating risky people, places, and situations and identifying strategies and intentions for staying safe" (p. 761). The

investigators further suggest that “the most effective prevention programs will likely require a broad contextual framework and multiple targets including motivation, affect regulation, and psychopathology” (p. 761).

Hogben et al. (2006) examined influences on the correct and consistent use of condoms to understand more about **condom use among female adolescents**. “In three structural equation models tested on a sample of 519 female adolescents, ... [the investigators] found that intentions were associated with both correct and consistent condom use; that females’ expectancy beliefs about ... [whether one ought to use condoms and their effect on sexual pleasure] were associated with intentions; and that females’ expectancy beliefs about partners’ sentiments reduced the impact of their expectancy beliefs about condom use” (p. 449). Translating these findings into intervention recommendations for increasing the correct and consistent use of condoms, Hogben and colleagues offer the following thoughts:

The obvious choice for an intervention would be to choose increasing a sense of obligation to use condoms because this construct was most strongly correlated with intentions. However, one ought to be careful in how such intervention content would be phrased – intervention participants may be as likely to ignore an aversive “duty-focused” stimulus as much as they are to assimilate the message and behave accordingly. ... So pleasure components of an intervention are also likely to be important, even though the construct was not as closely correlated with intentions as were obligations.

Addressing expectancy beliefs and increasing intentions in an intervention might not[, however,] be sufficient, ... [because] the

belief that partners do not like condoms reduces female adolescents’ own motivation to use them, which reduces the likelihood of even trying to negotiate their use. In the worst cases, an intervention that improved negotiation skills for female adolescents would be improving a skill set for adolescents with some partners with whom they have no plans to negotiate. At the very least, interventions focused mainly on female adolescents’ own attitudes toward and cognitions about condoms are missing a component of predicting intentions and subsequent use that plausibly interferes with intervention effects.

That noted, the sizeable collinearity among the expectancy beliefs is a reminder that none of those variables ... studied should be ignored. An intervention focused on disassociating perceptions about partners from perceptions about condoms (which would reduce collinearity) could do as much to increase the salience of female adolescents’ expectancy beliefs about condoms to intentions to use them as would boosting positive expectancies directly. (pp. 458-459)

Finally, Villarruel, Jemmott, and Jemmott (2006) randomized 553 **Latino youth** between the ages of 13 and 18 years who were attending northeast Philadelphia schools to either an **HIV risk-reduction intervention** or a health-promotion intervention that focused on diet, exercise, and substance use. “The HIV risk-reduction and health-promotion interventions were similar in organization, format, length, and delivery mode” (p. 773), each consisting of six 50-minute modules that were delivered by adult facilitators. “Both interventions involved small-group discussion, videos, interactive exercises, and skill-building activities” (p.

773); were delivered to small, mixed-gender groups in either Spanish or English; and reflected Latino cultural values. Data were collected both before and after the intervention and at 3, 6, and 12 months; 81.6% of participants were retained at the 12-month follow-up.

Analyses ... revealed that adolescents in the HIV intervention were less likely to report sexual intercourse ..., multiple partners ..., and days of unprotected intercourse ... and [were] more likely to report using condoms consistently Baseline sexual experience and language use moderated intervention efficacy. Adolescents assigned to the HIV intervention who were sexually inexperienced at baseline reported fewer days of unprotected sex ...; Spanish speakers were more likely to have used a condom at last intercourse ... and had a greater proportion of protected sex ... compared with similar adolescents in the health-promotion intervention. (p. 772)

The investigators conclude that “this study is an important contribution in assisting Latino adolescents to decrease HIV sexual risk behavior ... [and provides] practitioners an evidence base from which to guide and support adolescents in sexual decision making” (p. 776).

About Persons Who Use Substances Copenhaver et al. (2006)

conducted a meta-analysis of randomized controlled trials (RCTs) to evaluate **behavioral HIV risk reduction interventions targeting people who inject drugs**. ... [The investigators] included 37 RCTs [available as of March 30, 2004] evaluating 49 independent HIV risk reduction interventions with 10,190 participants. Compared to con-

trols, intervention participants reduced [both] injection drug use (IDU) and ... [the use of noninjected drugs], increased drug treatment entry, increased condom use, and decreased trading sex for drugs. Interventions were more successful at reducing IDU when participants were non-Caucasians, when content focused equivalently on drug-related and sex-related risks, and when content included interpersonal skills training specific for safer needle use. Condom use outcomes improved when two intervention facilitators were used instead of one. IDU outcomes did not decay, but condom use outcomes did. Behavioral interventions reduce risk behaviors among people who inject drugs, especially when interventions target both drug risk and sexual risk behaviors, and when they include certain behavioral skills components. (p. 163)

With regard to the decay in condom use outcomes, Copenhagen and colleagues suggest that “[m]aintaining consistent condom use may require additional strategies (e.g., booster sessions) to address emergent challenges ...” (p. 170).

Margolin, Beitel, Schuman-Olivier, and Avants (2006) conducted a controlled study involving 72 methadone-maintained clients who were assigned either to standard care plus 8 weeks of **Spiritual Self-Schema (3-S) therapy**, or to standard care alone. 3-S therapy “is a manual-guided intervention for increasing motivation for HIV prevention that integrates a cognitive model of self within a Buddhist framework suitable for people of all faiths” (p. 311).

3-S therapy is based on ... [the supposition] that addicted individuals can develop, elaborate, and make available for habitual activation, a self-schema that is

incompatible with causing harm – the spiritual self-schema – which will provide them with rapid access to the repertoire of HIV

preventive behaviors that they are taught ... in their HIV educational sessions. It is ... a basic goal of 3-S therapy to weaken the addict

Tool Box

Resources

Books & Articles:

Chander, G., Himelhoch, S., & Moore, R.D. (2006). Substance abuse and psychiatric disorders in HIV-positive patients: Epidemiology and impact on antiretroviral therapy. *Drugs*, 66(6), 769-789.

Chander, Himelhoch, and Moore “reviewed the English language literature on (i) the prevalence of alcohol and illicit drug use, mental health disorders and co-occurring mental health and substance use disorders in HIV-infected individuals; (ii) their effect on antiretroviral efficacy/effectiveness and adherence; and (iii) interventions to improve antiretroviral effectiveness and adherence in these populations” (p. 770).

Davies, G., Koenig, L.J., Stratford, D., Palmore, M., Bush, T., Golde, M., Malatino, E., Todd-Turner, M., & Ellerbrock, T.V. (2006). Overview and implementation of an intervention to prevent adherence failure among HIV-infected adults initiating antiretroviral therapy: Lessons learned from Project HEART. *AIDS Care*, 18(8), 895-903.

“Project HEART, an acronym for Helping Enhance Adherence to Retroviral Therapy, was a prospective, controlled study to develop, implement, and evaluate a clinic-based behavioural intervention to prevent adherence failure among HIV-infected adults beginning their first highly active antiretroviral therapy (HAART) regimen In this paper, we describe the conceptualisation and components of the HEART intervention, characteristics of the participants and the contexts within which they were implementing their first HAART regimen, and lessons learned implementing HEART, particularly with respect to the formal use of support partners” (p. 895).

Harshbarger, C., Rebchook, G., O'Donnell, L., & Collins, C. (Eds.). (2006). Moving science into practice: The role of technology exchange for HIV/STD prevention. *AIDS Education*

& Prevention, 18(Suppl. A), 1-197.

“This special supplement ... describes the Centers for Disease Control and Prevention's (CDC's) national Diffusion of Effective Behavioral [I]nterventions (DEBI) project and discusses the adoption, adaptation, and implementation of evidence-based HIV prevention interventions by health departments and community-based organizations (CBOs)” (p. 1).

Haug, N.A., Sorensen, J.L., Gruber, V.A., Lollo, N., & Roth, G. (2006). HAART adherence strategies for methadone clients who are HIV-positive: A treatment manual for implementing contingency management and medication coaching. *Behavior Modification*, 30(6), 752-781.

“This article outlines intervention strategies to improve medication adherence among clients who are in methadone maintenance. In this treatment manual, the authors delineate contingency management procedures, including voucher incentives and a fish-bowl lottery prize system. They also describe intervention elements and adherence tools for medication coaching. The purpose of this manual is to describe the intervention procedures for clinicians and to serve as a resource for drug abuse treatment programs that serve clients who are HIV-positive” (p. 752).

Highstein, G.R., Willey, C., & Mundy, L.M. (2006). Development of stage of readiness and decisional balance instruments: Tools to enhance clinical decision-making for adherence to antiretroviral therapy. *AIDS & Behavior*, 10(5), 563-573.

“This study presents the development of Stage of Readiness (SOR) and decisional balance instruments based on the Transtheoretical Model of Behavior Change (TTM) to improve adherence to antiretroviral therapy (ART). ... Baseline stage of change and decisional balance scores prospectively predicted 1-year viral load level, thus identifying participants in need of adherence support interventions. Use of these instruments can give a pro-

self-schema and strengthen a spiritual self-schema that is incompatible with causing harm to self or others, so when clients find

themselves in high-risk situations, a sequence of behavior is set into motion that leads to HIV preventive behavior rather than to high

risk behavior. (p. 313)

Margolin and colleagues found 3-S therapy

vider added objective data on which to base a decision to either prescribe ART immediately or to first implement an intervention tailored to enhance this patient's readiness to adhere" (p. 563).

Mannheimer, S.B., Mukherjee, R., Hirschhorn, L.R., Dougherty, J., Celano, S.A., Ciccarone, D., Graham, K.K., Mantell, J.E., Mundy, L.M., Eldred, L., Botsko, M., & Finkelstein, R. (2006). The CASE Adherence Index: A novel method for measuring adherence to antiretroviral therapy. *AIDS Care*, 18(7), 853-861.

The Center for Adherence Support Evaluation (CASE) Adherence Index "is a composite measure composed of three simple questions addressing three different aspects of ART adherence: difficulty taking ART medication on time, frequency of missed ART doses and time since most recent missed ART dose" (p. 859). In this study, "the CASE Adherence Index was a better predictor of HIV ... [viral load] than three-day self-report. The index also ... performed as well as three-day self-report as a predictor of CD4 [cell] counts. The CASE Adherence Index's ease and speed of administration suggest that it is a useful tool for assessing ART adherence as part of routine clinical assessment in standard HIV care" (p. 860).

Olatunji, B.O., Mimiaga, M.J., O'Cleirigh, C., & Safren, S.A. (2006). Review of treatment studies of depression in HIV. *Topics in HIV Medicine*, 14(3), 112-124.

"This article is a review of the existing literature on the treatment of depression in the context of HIV, including: (1) psychosocial and behavioral health interventions that directly target *Diagnostic and Statistical Manual of Mental Disorders* (DSM) unipolar depressive disorders, (2) psychosocial interventions that indirectly target depressive symptoms, and (3) psychopharmacologic treatment studies for DSM-IV unipolar depressive disorders. ... Because of the high frequency of depression comorbid with HIV, and

the association of depression with important self-care behaviors in this population, identification of efficacious treatments for depression has the potential to improve both overall quality of life and, potentially, health outcomes" (p. 112).

Prado, G., Schwartz, S.J., Pattatucci-Aragón, A., Clatts, M., Pantin, H., Fernández, M.I., Lopez, B., Briones, E., Amaro, H., & Szapocznik, J. (2006). The prevention of HIV transmission in Hispanic adolescents. *Drug & Alcohol Dependence*, 84(Suppl. 1), S43-S53. "This article reviews the state of the science in HIV prevention for Hispanic adolescents. ... Literature is reviewed in three broad areas: (1) the prevalence rates of drug and alcohol misuse, sexual practices, and HIV infection; (2) risk and protective factors for drug and alcohol misuse and unprotected sex (in general and specifically for Hispanics); and (3) the state of HIV prevention intervention development and evaluation targeting Hispanic youth" (p. S43).

Shernoff, M. (2006). Negotiated non-monogamy and male couples. *Family Process*, 45(4), 407-418.

"One issue that has the potential to confound family or couples therapists working with male couples is the issue of nonmonogamy. For many therapists, sexual nonexclusivity challenges fundamental clinical assumptions that 'affairs,' or extra-relationship sex or romantic involvements, are symptoms of troubled relationships and are always a form of 'sexual acting out.' This article explores the issue of sexual exclusivity and nonexclusivity within male couples. In order to achieve both clinical and cultural competency in work with male couples, therapists need to challenge their cultural biases regarding monogamy" (p. 407).

Tsevat, J. (Ed.). (2006). Spirituality/religion and quality of life in patients with HIV/AIDS. *Journal of General Internal Medicine*, 21(Suppl. 5), S1-S68.

"Collectively, the 8 papers in this supplement present a state-of-the-art look at both quality of life and spirituality/

religion from 2 longitudinal studies involving a total of 550 patients with HIV from Cincinnati, OH, Washington, DC, Pittsburgh, PA, and Miami, FL" (p. S1).

Whetten, K., Reif, S., Ostermann, J., Pence, B.W., Swartz, M., Whetten, R., Conover, C., Bouis, S., Thielman, N., & Eron, J. (2006). Improving health outcomes among individuals with HIV, mental illness, and substance use disorders in the Southeast. *AIDS Care*, 18(Suppl. 1), S18-S26.

"This article describes the results of a study that provided integrated behavioral health treatment of triply diagnosed adults residing in rural and urban North Carolina. The treatment model ... was created to meet the specific needs of triply diagnosed individuals" (p. S19). Over a 1-year period, Whetten and colleagues "detected statistically significant decreases in participants' psychiatric symptomatology, illicit substance use, alcohol use, and inpatient hospital days. Participants also reported fewer emergency room visits and were more likely to be receiving antiretroviral medications and adequate psychotropic medication regimens at follow-up. No changes in sexual risk, physical health, or medical adherence were detected after treatment participation. This integrated treatment model offers an option for treating HIV-infected individuals with mental health and substance use disorders that can be adapted for use in a variety of psychiatric and medical treatment settings" (p. S18).

On the Web:

The New York State Department of Health AIDS Institute, in collaboration with the Johns Hopkins University Division of Infectious Diseases, has produced a new set of treatment guidelines entitled "Adherence to Antiretroviral Therapy Among HIV-Infected Patients with Mental Health Disorders," located at <http://www.hivguidelines.org/Content.aspx>.

— Compiled by
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to be efficacious with respect to achieving its intended goal of increasing motivation for HIV preventive behavior among drug users. It also had the added effect of changing actual HIV risk behavior. Clients receiving 3-S therapy were eight times less likely to have engaged in HIV risk behavior posttreatment, controlling not only for pretreatment risk behavior but also for demographic and drug use variables. Correlational analysis supported the hypothesized relation between spiritual practices and motivation for HIV prevention. This analysis also showed that attendance at 3-S therapy sessions was significantly related not only to increased spiritual practice but also to HIV prevention motivation and behavior. (p. 320)

Swiss investigators (Brodbeck, Matter, & Moggi, 2006) conducted computer-assisted telephone interviews with a random sample of 2,790 heterosexual men and women between the ages of 16 and 24 years to examine the association between **cannabis use and sexual risk behavior.** Importantly,

the results of this study found only a general association between substance use and unprotected sexual intercourse that could not be found in event-level analyses. The situational influence of cannabis did not increase sexual risk behavior among young men and women. Cannabis users, however, had decreased intentions to use HIV protection, lower self-efficacy, and a more hedonistic and risky lifestyle, leading to more frequent risky sexual behavior. Thus, the target variables for HIV prevention do not seem to differ for young adults using or not using cannabis. ... Complementary to this, risk preference and hedonism as an underlying risk disposition for

cannabis use and sexual risk behavior might be addressed in interventions for enhancing risk competence and the choosing of exciting activities with less harm potential. (p. 604)

Additionally, Brodbeck and colleagues argue that "HIV interventions that include a message on substance use should be careful not to create strong expectancies that substance use leads to sexual risk behavior, for this could promote a self-fulfilling prophecy and have the effect of giving people an excuse for engaging in unprotected sex ..." (p. 604).

HIV Assessment News

HIV Counseling & Testing

Hullett (2006) drew data from 107 predominantly white, sexually active **college students** to develop a model that describes **motivations for HIV testing** in this population and found that, "[o]verall, messages advocating testing for the self-interested reason of one's own health were more effective than messages advocating testing for the goal of protecting one's partners" (p. 57). On the basis of these findings, Hullett makes the following recommendations:

Foremost would be the importance of increasing perception of uncertainty [regarding one's HIV status], given its role in both increasing positive attitudes [toward HIV testing] directly and indirectly through fear arousal. ... [M]essages advocating testing for the purpose of taking care of one's health could be effective at convincing young adults beyond this sample to get tested for HIV. Such messages could be used in tandem with other approaches that attempt to remove inaccurate beliefs that prevent people from getting tested. For example, investigators have identified a number of perceptions that may lead to underestimating one's risk

of infection, including the perception that HIV positive individuals are different from themselves, trust that develops in monogamous relationships, and perceptions that one's partner is "safe" (i.e., disease-free ...). These perceptions reduce people's uncertainty regarding STDs, leading to the potentially false belief that their probability of infection is zero. It would be useful for practitioners to continue highlighting the fact that none of these relational perceptions provides an accurate means for assessing STD status and [such perceptions] are only useful when people truly know their and their partners' status. As these misperceptions are corrected and uncertainty increases, message recipients should be told explicitly that medical testing is necessary for reducing their uncertainty about their health. (pp. 65-66)

Psychiatric Assessment

Italian investigators (De Ronchi et al., 2006) evaluated and compared 12 individuals living with HIV who presented with first-episode psychosis and 10 matched HIV-negative individuals who also presented with first-episode psychosis. The investigators summarize their main findings in these words:

1. HIV-positive subjects had higher mean scores on the global BPRS [Brief Psychiatric Rating Scale] and on the paranoid PANSS [Positive and Negative Syndrome Scale] subscale compared with HIV-negative subjects. Conversely, [a] higher prevalence of affective and anxious symptoms was found in the HIV-negative patients in comparison to HIV-positive ... [patients].
2. HIV-positive ... [subjects] had significantly greater attention-concentration impairment than HIV-negative ... [subjects].

Building Block

CDC Recommends Routine HIV Testing in Health Care Settings

On September 21, 2006, the Centers for Disease Control and Prevention (CDC) issued new recommendations for HIV testing:

These recommendations ... are intended for all health-care providers in the public and private sectors, including those working in hospital emergency departments, urgent care clinics, inpatient services, substance abuse treatment clinics, public health clinics, community clinics, correctional health-care facilities, and primary care settings. The recommendations address HIV testing in health-care settings only. They do not modify existing guidelines concerning HIV counseling, testing, and referral for persons at high risk for HIV who seek or receive HIV testing in nonclinical settings (e.g., community-based organizations, outreach settings, or mobile vans). The objectives of these recommendations are to increase HIV screening of patients, including pregnant women, in health-care settings; foster earlier detection of HIV infection; identify and counsel persons with unrecognized HIV infection and link them to clinical and prevention services; and further reduce perinatal transmission of HIV in the United States. These revised recommendations update previous recommendations for HIV testing in health-care settings and for screening of pregnant women

Major revisions from previously published guidelines are as follows:

For patients in all health-care settings

- o HIV screening is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- o Persons at high risk for HIV infection should be screened for HIV at least annually.
- o Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing.
- o Prevention counseling should not be required with HIV diagnostic testing or as part of HIV screening programs in health-care settings.

For pregnant women

- o HIV screening should be included in the routine panel of prenatal screening tests for all pregnant women.
- o HIV screening is recommended after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- o Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing.
- o Repeat screening in the third trimester is recommended in certain jurisdictions with elevated rates of HIV infection among pregnant women. (p. 1)

– Compiled by Abraham Feingold, Psy.D.

Reference

Centers for Disease Control and Prevention. (2006). Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *Morbidity & Mortality Weekly Report*, 55(RR14), 1-17.

3. Among HIV-positive subjects, heterogeneity in outcome has been frequently observed: poor prognosis in terms of mortality rate and, conversely, remission of psychotic symptoms. (pp. 875-876)

In short, these investigators identify the following clinical features that suggest a **first-episode psychosis in persons living with HIV**:

1. Attention-concentration impairment

2. Reduction of insight
3. Lack ... [of] co-operation
4. Poverty of speech
5. Low structured paranoid delusion, suspiciousness, hostility
6. Schneider's first rank symptoms
 o *Alien thoughts being inserted or withdrawn from person's mind*
 o *Delusional perception (a delusion arising suddenly and fully formed in the wake of a normal perception)*
 o *Hallucinations (e.g., running commentary on person's actions)*

7. Absence of affective symptoms (e.g., depression, anxiety) (p. 876)

De Ronchi and colleagues believe that

taking into account psychopathological dimensions may help psychiatrists in clinical decision-making regarding the differential diagnosis of psychotic symptoms. The psychopathological pattern of first-episode psychosis in HIV-positive patients repre-

sents an 'elementary model' of acute psychosis characterized by paranoid delusions, in the absence of the usual affective symptoms. This seems to be related to: (a) low ability to develop abstract thoughts, (b) attention-concentration impairment and (c) reduction of insight and un-cooperativeness. Conversely, the psychopathological pattern of psychosis in HIV-negative ... [patients] showed a lower occurrence of paranoid symptoms and a higher occurrence of depressive symptoms, such as guilt and hypochondria. This seems to be related to good insight, preserved abstract thinking and more structured delusions. (p. 877)

Neuropsychological Assessment

Martin et al. (2006) investigated the relationship

between cognitive functioning and medical markers in **HIV-infected children and adolescents treated with highly active antiretroviral therapy (HAART) with varying levels of computed tomography (CT) brain scan abnormalities.** The Wechsler Intelligence Scale for Children Third Edition [WISC-III] was administered to 41 vertically infected children (mean age = 11.2 years) treated with HAART for at least 1 year. Other procedures at the time of testing included CT brain scans and collection of CD4 cell counts and plasma ... [viral loads]. (p. 633)

"Although global cognitive functioning among participants was in the Average range, children with minimal to moderate CT brain scan abnormalities scored significantly lower than children with normal scans on composite measures of cognitive functioning and five specific subtests, especially tasks involving executive functions. Furthermore, children with worse immune status (CD4+ counts

≤ 500) scored lower on subtests measuring processing speed. Viral load was unrelated to cognitive test scores" (pp. 633-634).

In summarizing these findings, Martin and colleagues suggest that, "whereas many HIV-infected children being treated with HAART are functioning within normal limits, a subset of children with CNS [central nervous system] disease continues to follow a distinct pattern of low average to below average cognitive functioning. The cognitive deficits in these children may be a result of ongoing viral replication in the CNS despite virologic control in the periphery ..., or residual effects of static HIV-related CNS disease" (p. 649). The investigators conclude that "children with HIV being treated with HAART remain at risk for developing CNS disease. Findings emphasize the importance of conducting neuropsychological [NP] assessments in this population, particularly for children with cortical atrophy and absolute CD4+ cell counts < 500" (p. 634).

Given the fact that many clinicians and researchers use abbreviated test batteries when assessing children and adolescents with HIV infection, it is important to be aware of the specific subtests that are most closely related to disease parameters. Based on results of this study, it would be advisable to include subtests assessing processing speed (Coding and Symbol Search), working memory (Arithmetic and Digit Span, interpreting separate span lengths for Digits Forward and Backward),² as well as Block Design and Picture Completion. In addition, although this study offers a com-

² "Results of this study suggest that the mental processes involved in Digits Backward are more relevant to the effects of HIV in the CNS than Digits Forward, and interpreting the two parts of this test separately should become standard practice in the assessment of the pediatric HIV population" (p. 650).

prehensive picture of cognitive functioning on the WISC-III, it would be useful for future research to utilize other measures to investigate specific areas such as executive functioning (e.g., Trails, Wisconsin Card Sort Test), verbal fluency, and attention (e.g., continuous performance tasks). (pp. 651-652)

HIV Treatment News

Medical Care

"For antiretroviral therapy, the 95% adherence 'threshold' is based on nucleoside-exposed patients who are receiving partially suppressive, unboosted protease inhibitor regimens" (p. 939), according to Bangsberg (2006), who monitored 110 participants in a longitudinal study of homeless and marginally housed adults living with HIV in San Francisco. Among these study participants, 56 were receiving protease inhibitors and 54 were receiving **non-nucleoside reverse-transcriptase inhibitors** (NNRTIs; e.g., nevirapine [NVP or Viramune®] or efavirenz [EFV or Sustiva®]). "Using unannounced pill counts and electronic medication monitoring," Bangsberg found that "viral suppression is common with a 54%-100% mean adherence level to [NNRTI] regimens" (p. 939). Bangsberg takes pains to specify that, "[a]lthough viral suppression may be possible with moderate levels of adherence, the probability of viral suppression and, more importantly, reduced disease progression and mortality improves with every increase in adherence level. As such, these data do not alter the goal to achieve the highest level of adherence possible; rather, they provide evidence that patients with moderate levels of adherence may also do well while receiving potent antiretroviral therapy" (p. 941).

Psychiatric/Psychological/ Psychosocial/Spiritual Care Psychopharmacology

Letendre et al. (2006) conducted a

12-week, open-label pilot study “[t]o determine **the effects of low-dose oral lithium on the [NP] performance** of [eight] individuals diagnosed with HIV-associated neurocognitive impairment [HNCI]” (p. 1885) who had been on stable antiretroviral therapy for a minimum of 12 weeks. “Oral lithium was initiated at 300 mg daily and was titrated to maintain 12-h trough concentrations between 0.4 and 0.8 mEq/l. Global [NP] performance was assessed by the global deficit score [GDS]” (p. 1885). All participants completed the 12-week trial, at which time

treatment with lithium resulted in statistically significant improvements in [NP] performance when administered as an adjunct to stable [antiretroviral therapy]. The improvements were noted in the domains of executive functions and information processing speed, functions that are often impaired by HIV infection ... and associated with deficits in daily functioning ..., such as medication management. Six of the eight individuals improved sufficiently to reduce their GDS from the impaired ... to the normal range. These improvements were statistically significant even though the sample size was small and the lithium dosage was low. ... [In addition,] lithium was well tolerated and was not associated with changes in ... [viral load] or CD4 cell counts. (p. 1887)

Letendre and colleagues conclude that “lithium may be a useful therapeutic adjunct to [antiretroviral therapy] in individuals suffering from HNCI. These preliminary results support the performance of a larger, randomized, placebo-controlled clinical trial of lithium” (p. 1887).

Access to Care

Drawing data from a sample of 141 adults living with HIV and participat-

ing “in a year-long substance abuse and mental health treatment programme” (p. S27) in North Carolina,³ Whetten, Whetten, et al. (2006) examined “whether distance to care predicts utilization of a substance abuse and mental health treatment programme that is regionally located and serves individuals from multiple counties when **transportation is provided as part of the intervention**” (p. S28).

Transportation, which included buses, taxis, and mileage reimbursement for private transportation, was provided free of charge for participants who needed this assistance. Nearly three-quarters (74%) of participants utilized the transportation services. No statistically significant differences in retention in, or utilization of, the mental health and substance abuse treatment programme were identified by distance to the treatment site. This analysis demonstrated that increased distance to care did not decrease utilization of the treatment programme when transportation was provided to the client when necessary. (p. S27)

The investigators conclude that “[t]hese results provide preliminary evidence that distance to substance abuse and mental health services need not be a barrier to care for HIV-positive individuals when transportation is provided. Such options may need to be considered when trying to treat geographically dispersed individuals so that efficiencies in treatment can be attained” (p. S27).

Sullivan et al. (2006) investigated the impact of **co-locating HIV care and mental health services** among 118 adults with serious mental illness and co-morbid HIV infection. Sullivan and colleagues expressed surprise that

³ For more information on this program, see Whetten, Reif, et al. (2006), highlighted in [this issue's Tool Box](#) on “Resources” (p. 7).

the great majority of ... subjects in this study were receiving regular, ongoing mental health and HIV treatment. For example, fully 93% reported taking antiretroviral medications. Neither co-location of services nor the extent to which providers located at different sites communicated with one another seems to have affected subjects' satisfaction with care or utilization of services. Although public sector care is often viewed as fractured and poorly integrated, this study suggests that consistent care for mental health and physical health problems is possible, even for persons with psychotic illnesses. Further, such consistent care does not seem to be dependent on co-locating these services. Persons with serious mental illness may have more self-care skills than expected. And it is likely that receipt of case management – sometimes from both the mental health and medical care sectors – and access to free or low-cost medication for treatment of HIV infection improved continuity of care for this group. The HIV-infected population may be benefiting from the increased attention and funding prompted by the HIV epidemic that has made possible case management services and access to medication. (pp. 358-359)

Adherence to Treatment

In Canada, Balfour et al. (2006) conducted an RCT in which 63 antiretroviral-naïve individuals receiving HIV medical care were assigned to either a manualized psycho-educational intervention (**Supportive Therapy for Adherence to Antiretroviral Treatment**, or STAART) or to standard HIV clinic multidisciplinary team care (the control condition). “STAART ... consisted of four weekly individual sessions, each

(Biopsychosocial Update is continued on Page 14)

Tool Box

From Surviving to Thriving: HIV-Associated Posttraumatic Growth

Calhoun and Tedeschi first described "posttraumatic growth" (PTG) in 1995. Since that time, they have further refined their thinking on this topic through clinical experience, scholarly interchange, and the examination of emerging empirical evidence (Calhoun & Tedeschi, 2004; Calhoun & Tedeschi, 2006; Tedeschi & Calhoun, 2004).

As we have conceptualized it, the process of [PTG] is set in motion by the occurrence of a major life crisis that severely challenges and perhaps shatters the individual's understanding of the world and his or her place in it. Certain kinds of personal qualities – extraversion, openness to experience, and perhaps optimism – may make growth a bit more likely. Initially, the individual typically must engage in coping responses needed to manage overwhelming emotions, but intense cognitive processing of the difficult circumstances also occurs. The degree to which the person is engaged cognitively by the crisis appears to be a central element in the process of [PTG]. The individual's social system may also play an important role in the general process of growth, particularly through the provision of new schemas related to growth, and the empathetic acceptance of disclosures about the traumatic event and about growth-related themes. [PTG] seems closely connected to the development of general wisdom about life, and the development and modification of the individual's life narrative. Although [PTG] has been found to be correlated with a reduction of distress, our thinking is [that] some degree of psychological upset or distress is necessary not only to set the process of growth in motion, but also some enduring upset may accompany the enhancement and maintenance of [PTG]. (Tedeschi & Calhoun, 2004, pp. 12-13)

In their view, PTG "is manifested in a variety of ways, including an increased appreciation for life in general, more meaningful interpersonal relationships, an increased sense of personal strength, changed priorities, and a richer existential and spiritual life" (Tedeschi & Calhoun, 2004, p. 1).

PTG & HIV

"Although the psychological sequelae of HIV infection include ... depression, anxiety, fear, helplessness, and guilt, there is growing evidence that positive changes attributed to diagnosis and living with HIV/AIDS occur. These positive changes ... may influence the adaptation to this disease, from infection to disease progression/stability and death" (Milam, 2006a, p. 214).

In this way, Milam initiates his summary of the evolving body of research on PTG among people living with and affected by HIV/AIDS (2006a), as well as his own research on the relationship between PTG and HIV disease progression (2006b).

According to Milam, "there is research documenting positive changes and strengths in people living with HIV/AIDS. Studies indicate that between 59% to 83% of people living with HIV/AIDS report experiencing positive changes since diagnosis ..." (2006a, p. 215). Importantly, "[a]lthough quantitative work is increasing, the majority of the published work explicitly examining PTG (and related constructs) among HIV-positive populations is qualitative" (2006a, p. 215). Other findings reported by Milam (2006a) include the following:

- o "Although [antiretroviral therapy] use has been positively associated with PTG, initiating or discontinuing [antiretroviral therapy] use has not been associated with PTG over time ..." (p. 216).

- o "There are positive relationships between PTG and various health behaviors That is, in addition to positive changes in relationships and life priorities, positive changes in health behaviors (diet, exercise, etc.) can also stem from HIV diagnosis ..." (p. 216).

- o "[A] majority (78-82%) of HIV/AIDS caregivers report PTG. In addition, PTG was most likely to occur among individuals who have strong spiritual beliefs, support from family and friends, and high levels of distress" (pp. 216-217).

- o "Research among HIV/AIDS caregivers and patients find[s] spiritual/religious beliefs/practices [to] be associated with both PTG and psychological adjustment These results support the notion that ... [religiousness]/spirituality can predispose one toward PTG by providing a framework ... through which a trauma can be appraised, and/or a social network that provides ongoing support" (p. 217).

- o "[A]mong people living with HIV, PTG may occur immediately after diagnosis. In a study excluding recently diagnosed patients (≤ 3 months), PTG had a weak inverse correlation with time since diagnosis ..." (p. 217).

- o "Among HIV patients, a significant inverse correlation is found between age and PTG, such that older participants experience less PTG ..." (p. 217).

- o "Women generally report more PTG than men ..., and this relationship is also seen among persons with HIV/AIDS ..." (p. 217).

- o "Because there is some evidence that PTG and SES [socioeconomic status] are positively associated ..., it is generally expected that higher SES would predict greater PTG, as PTG may require personal resources that are not available to lower SES individuals. However, the data among HIV populations ... [are] mixed; one study found a positive association with SES ... while another found no such association ..." (p. 217)

- o "Race and ethnic differences in PTG are unknown as most studies concerning PTG have not focused on this issue. Current reports do not suggest clear ethnic differences. One study among women finds White participants to report more PTG ... whereas another among both women and men finds non-White participants to report the most PTG ..." (p. 218).

o “Although cross-sectional results show optimism is positively associated with PTG among people living with HIV/AIDS, this relationship has not held up in longitudinal analyses; optimism has failed to predict PTG over time Nevertheless, these results provide evidence that PTG does not simply reflect an underlying optimistic disposition” (p. 218).

o “Although HIV diagnosis is the beginning of a difficult time requiring ... ongoing adjustment to many issues, including depressive symptoms, PTG will commonly co-occur with the negative psychological sequelae of a diagnosis of HIV/AIDS. However, PTG is hypothesized to aid in the ongoing adjustment to HIV as indicated by higher levels of mental health indicators.

o In a longitudinal study, baseline levels of PTG did not significantly predict depression levels over time among HIV patients However, change in PTG was a significant predictor of depressive symptoms over time; those who always experienced PTG or gained PTG from baseline to follow-up had fewer depressive symptoms over time compared to those who never experienced or lost PTG from baseline to follow-up

o ... These results suggest that the *process* of PTG, achieving and maintaining positive changes, is associated with lower levels of depressive symptoms/distress over time. However, this relationship is likely reciprocal. That is, among HIV patients, developing and maintaining PTG has a protective effect on the development of depressive symptoms, whereas the presence of depressive symptoms is an impediment to achieving PTG” (p. 218).

o “A number of studies have exclusively examined PTG among women living with HIV/AIDS. These studies find PTG to be associated with [SES] ... and to include positive changes in health behavior [One investigator] found HIV-positive women with children to report less PTG than those without children. This result suggests that burdens and responsibilities associated with caregiving for children

may hamper PTG for HIV-positive mothers” (pp. 218-219).

o “[A] number of studies have found salutary relationships between positive psychological factors and HIV disease progression Early evidence suggests that PTG may also be one of these factors.

o ... [A] study among HIV-positive men and women found those with undetectable viral load (< 500) to have significantly higher PTG scores Although PTG was not associated with viral load over time, it was associated with CD4 counts over time, particularly among non-Whites That is, for non[-]White participants, those who experienced PTG had higher CD4 counts over time compared to those who did not experience PTG Importantly, this interaction was not explained by differences in depressive ... [symptoms], or health behaviors.

o These preliminary results provide some promising evidence suggesting that PTG may influence the course of HIV disease ... “ (2006a, p. 220).¹

Bring On the Healing

In introducing a special section of the *Journal of Consulting & Clinical Psychology* on PTG, Park and Helgeson (2006) point out that,

to date, interventions generally have not been explicitly aimed at increasing perceptions of growth, with the exception of several writing studies, most of which were not designed as clinical interventions. In fact, given the conceptual and empirical questions posed ... [in this literature], clinical applications need to be made cautiously. The field is not yet at a place in basic research to endorse the development of large-scale growth interventions applied to people who have undergone traumatic life events. Until researchers understand more about the origins of growth, the conditions under which

¹ For more information on this topic, go to the **Tool Box** entitled “Health Correlates of Cognitive Processing & Meaning-Making for People Living with HIV/AIDS” in the [Spring 2003](#) issue of *mental health AIDS*.

growth is veridical [i.e., actually occurring], and the best way to assess growth, links to psychological and physical health will not be fully understood. Without this latter knowledge, it may be ethically irresponsible to attempt growth-based interventions with a highly distressed population. However, this does not preclude more limited experimental studies of growth to answer some of these questions. (p. 795)

Fortunately, as Calhoun and Tedeschi make clear,

we are *not* proposing a new form of treatment, but rather looking for ways to integrate the perspective of PTG into common approaches to therapy for survivors of trauma. ... We believe our approach can fit with any sound intervention, but it may be particularly compatible with cognitive, narrative, and existentially based treatments Our description of therapy takes into account ... [the elements of our model of PTG], using them as a guide to inform the clinician about how to focus treatment as the trauma survivor’s responses gradually flow through the sequence proposed in the model, from early responses characterized by distress and intrusion to outcomes of PTG, revised narrative, and wisdom. (Calhoun & Tedeschi, 2006, p. 291)

As Calhoun and Tedeschi continue, “[i]t is not possible for us to be formulaic about the clinical maneuvers to make in an approach to trauma treatment that includes the consideration of PTG. There is much in timing and subtle commentary that is involved – but the principle of expert companionship can guide clinicians working with trauma survivors to do the kinds of things that are likely to allow for and support this PTG” (Calhoun & Tedeschi, 2006, p. 303). “We consider ourselves to be *facilitators* of PTG that is created or discovered by persons who are able to process information about themselves in the aftermath of

(Tool Box is continued on Page 14)

trauma in a relationship with an expert companion" (Calhoun & Tedeschi, 2006, p. 298). Zoellner and Maercker (2006) offer suggestions to clinicians on how such facilitation might occur ([see sidebar](#)).

With regard to persons living with HIV/AIDS, Milam (2006a) is quick to point out that, although "preliminary research finds salutary relationships between PTG and markers of disease course and important health behaviors" (p. 221), "positive thinking is not a panacea. That is, any intervention designed to enhance perceptions of positive changes should continue to emphasize traditional health care and a realistic assessment of one's health status. Further, patients should not be chastised for holding negative attitudes" (p. 221).

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– Compiled by
Abraham Feingold, Psy.D.

PTG Pointers for Clinicians

Zoellner and Maercker (2006) offer the following set of guidelines to assist clinicians with incorporating a PTG perspective into their work with trauma survivors:

o Therapists should have an understanding of how the process of working through the impact of trauma is ... often associated with the development of a new self-understanding, a new understanding of the "outer world," and the relationship between the two. ...

o When patients describe positive changes as the result of their struggle with trauma, clinicians should support, emphasize, and encourage those perceptions. Because positive illusions have been demonstrated to be associated with positive adaptation to trauma and other stressful events, there seems to be no harm for patients when therapists directly address the issue of positive changes, personal growth, or benefits from coping with the traumatic event.

o In doing so, therapists should have a tolerance for obvious false, naive, unverifiable positive illusions and positive interpretations. ... In psychotherapy, what is helpful and useful for patients is more essential than what is truthful. ... [Tolerate] obvious positive illusions held by the patient ... [if] those positive illusions, including personal growth perceptions, ... [do not] hinder a constructive, adaptive recovery and healing process.

o Psychotherapy constitutes a good context [in which] to explore positive change in the aftermath of crisis. The simultaneous ... [acknowledgment] of patients' suffering and the negative impact of trauma on their lives within the therapy process, enables clients – on the basis of a trustful and intimate therapeutic relationship – to also explore positive changes as [a] result of their coping process. Outside of the therapeutic context, clients may have been given advice by friends to "see the positive" or "concentrate on the good things" when having talked about the negative impact of trauma. That kind of rushed advice is usually not helpful because it is often linked to the denial of suffering and existing negative consequences. It goes without saying that therapists, when fostering growth within psychotherapy, should avoid ... [this] doctrine

o This professional avoidance should be accompanied by an open-minded attitude on the part of the therapist that allows patients to find their own specific meanings, interpretations, way[s] of coping, and recovery. Perceptions of growth should be supported and encouraged when they occur or they can be directly addressed by the therapist, but the absence of growth or benefit finding by the patient should not be regarded as a failure. If patients can not see any positives in their struggle with crisis, the issue should be dropped, at least for some time, and therapeutic efforts should continue to reduce distress and encourage a constructive coping process.

o Also, patients' individual differences should be considered when incorporating those issues. ... [C]lients' belief systems, personality characteristics, and coping styles will predispose them toward particular appraisals and coping responses[,] making the perception or experience of growth more or less likely and more or less important for individual adjustment.

o Addressing issues of growth, benefit finding, meaning construction, and the like need[s] proper timing. In the immediate aftermath of crisis and the first coping stage, it does not seem to be useful to lead clients to focus on positive changes. Before addressing those issues, the most extreme distress needs to be reduced and some coping success need[s] to occur] As a ... [rule] of thumb, one could plan to address or be especially alert to those issues during the last third of therapy.

o Whether or not the role of the therapist should be more passive or active in addressing issues of growth depends on the patient's individual character, psychiatric disorders, and the reasons for ... [seeking] treatment. ... In the treatment of particular patient populations, such as trauma survivors, medically ill patients, or bereaved individuals, the inclusion of an existential dimension, and issues of meaning and growth, are probably more important for psychological adaptation and well-being than for some other patient populations. In those cases, therapists should take on a more active role and possibly incorporate explicit elements intended to foster growth from adversity. ... (pp. 350-352)

Reference

- Zoellner, T., & Maercker, A. (2006). Posttraumatic growth and psychotherapy. In L.G. Calhoun & R.G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research & practice* (pp. 334-354). Mahwah, NJ: Erlbaum.

lasting for 75-minutes. The sessions aimed to prepare patients for the

challenges of HAART, develop strategies to improve medication adherence before starting HAART, become

more active in their treatment[,] ... and improve their coping skills" (p. 832). After the investigators con-

trolled for medication readiness scores at baseline, “intervention patients ($n = 30$) reported significantly higher mean medication readiness following the STAART intervention (four-weeks post-baseline) ... compared to controls Among depressed patients ($n = 27$), those receiving the intervention ($n = 15$) reported significantly lower mean depression scores at four-weeks post-baseline ... compared to controls ...” (p. 830). Balfour and colleagues sum it up this way: “Overall, results indicated that the STAART intervention enhanced HIV treatment readiness compared to standard HIV clinic care by better preparing patients before initiating HAART. In addition, HIV patients who were depressed at study baseline and who were randomized to the STAART intervention condition experienced reductions in depression at four-week follow-up, whereas depressed patients who received standard clinic care had no improvements in symptoms of depression at follow-up” (p. 835).

Serostatus Disclosure

What is the **relationship between HIV serostatus disclosure and adherence** to antiretroviral therapy? Stirratt et al. (2006) studied 215 adults in serodiscordant relationships who were taking < 80% of their medication doses within specified time windows, assessed through an electronic monitoring device (MEMS caps). “Overall, 19% of the sample reported missing medication doses in the last two months due to concerns regarding [HIV] serostatus disclosure. Participants who reported greater serostatus disclosure to ... [family members and close personal contacts] demonstrated higher rates of adherence, and this relationship remained after controlling for other explanatory variables. The relationship between disclosure and adherence was not mediated by practical support for adherence from others” (p. 483).

Participants who cited disclosure concerns as a reason for missed doses also evidenced greater depression and negative affect, as well as lower adherence self-efficacy, adherence motivation, and expectations of detrimental outcomes from non-adherence. This may indicate that contexts of non-disclosure are more likely to compromise adherence among patients with poorer mental health, motivation, and behavioral skills (although it may alternatively be that patients with these conditions are simply more likely than others to endorse disclosure-related concerns as a reason for non-adherence). (p. 490)

Stirratt and colleagues stress that

[c]linicians working with HIV+ patients should be aware of the negative impact that lack of disclosure may have on maintaining consistent adherence. It may be important to help patients consider the potential benefits of disclosure (e.g., increased treatment support) vs. the possible negative consequences (e.g., discrimination). Blanket disclosure in all contexts and circumstances should not be advised. Instead, patients should be provided with strategies to maintain adherence in situations where disclosure of HIV serostatus is ill advised, and also taught skills to disclose in a manner that can help avoid stigma and discrimination in order to access social support for adherence. (p. 491)

A discerning approach to HIV serostatus disclosure is further reinforced by Vanable, Carey, Blair, and Littlewood (2006), who “examined the relationships among **[HIV] stigma-related experiences** and depression, medication adherence, serostatus disclosure, and sexual risk among 221 HIV-positive men and women” (p. 473).

In bivariate analyses that controlled for background characteristics, stigma was associated with depressive symptoms, receiving recent psychiatric care, and greater HIV-related symptoms. Stigma was also associated with poorer adherence and more frequent serostatus disclosure to people other than sexual partners, but showed no association to sexual risk behavior. In a multivariate analysis that controlled for all correlates, depression, poor adherence, and serostatus disclosure remained as independent correlates of stigma-related experiences. (p. 473)

The investigators conclude that “stigma is associated with psychological adjustment and adherence difficulties and is experienced more commonly among people who disclose their HIV status to a broad range of social contacts” (p. 473). “[T]o reduce the negative impact of stigma on the lives of persons living with HIV[,] ... risk reduction, adherence, and coping interventions should address HIV-positive patients’ concerns about stigmatization. At a minimum, interventions should provide a supportive environment for discussing the ways in which stigma interferes with mood management, medication adherence, and sexual partner communication” (p. 481).

Coping, Social Support, & Quality of Life

Continuing this focus on stigma, Lekas, Siegel, and Schrimshaw (2006) conducted interviews with two convenience samples of 79 women living with HIV/AIDS: one sample was interviewed prior to the introduction of HAART and a second matched sample was interviewed after HAART had become widely available. The investigators examined interview data to identify changes (if any) in the **HIV-related stigma** experiences of these women during different eras of the epidemic. Compari-

sons made between these two time periods

demonstrated that the negative stereotypes associated with infected women have remained largely unchanged and that women continue to internalize them and feel stigmatized. Women's stigma consciousness remains high, even in the HAART era, and often results in vicarious stigmatization [when witnessing or hearing about the denigration of others living with HIV], another major source of stigmatization. The ... [persistence] of family members' unfounded fears of contagion that lead to ... hygienic derogatory acts [i.e., being subjected to unnecessary or excessive hygienic procedures] suggests that educational interventions continue to be significant venues of destigmatization. Finally, the fact that instances of enacted discrimination by medical and social service providers have decreased over time indicates that, as least within the AIDS field, stigmatization and discrimination against persons with HIV/AIDS are declining. (p. 1189)

In short, "[t]his analysis revealed that although enacted stigmatization has decreased slightly, felt stigma remains a primary adaptational challenge facing women with HIV/AIDS" (p. 1165).

These findings underscore the importance of designing interventions that prevent the internalization of stigma. Researchers ... have suggested that rejecting the negative connotations of one's stigmatizing status and strengthening other positive aspects of one's identity are the two primary means of preventing internalization of stigma. Given the ... [persistence] of the HIV/AIDS stereotypes, ... [Lekas and colleagues] suggest that interventions focus

on accentuating the positive features of these women's identity. An emphasis, for instance, on the extended survival enjoyed by many infected persons in the HAART era might cast these women as "survivors," a role that implies an accomplishment and a certain degree of resilience. In addition, intervention programs should also ... develop messages that bolster their sense of female worth by highlighting, for instance, their parenting achievements, or their peer activism around women's health issues. (pp. 1186-1187)

In another study involving these two samples, Siegel, Schrimshaw, and Lekas (2006) focused on changes (if any) in **sexual activity, interest, and feelings of attractiveness** among these women during different eras of the epidemic. Here again, the investigators found that

[w]omen in both the pre-HAART and HAART eras frequently discussed decreased sexual activity, a loss of sexual interest, and a diminished sense of sexual attractiveness following their HIV infection. In addition, they reported a number of reasons for why they had discontinued sexual activity or were no longer interested in sex, including anxiety about HIV transmission, a loss of freedom and spontaneity during sex, fears of emotional hurt, [and] not wanting the hassle of sexual relationships However, the types of changes in their sexuality women described, nor the reasons offered for these changes, did not differ ... in the pre-HAART and HAART eras. (p. 437)

Siegel and colleagues observe that these findings

suggest that many HIV-infected women might benefit from counseling around their sexuality.

While a certain amount of anxiety concerning infecting others or becoming reinfected can be adaptive if it motivates consistent condom use, too much anxiety may be maladaptive if it results in a fear of physical closeness and any kind of sexual intimacy, even acts that carry no risk of HIV transmission. ... The data further suggest that the women felt deeply discredited and profoundly tainted by their disease in ways that were very damaging to their self-esteem and identity as women and potential partners. ... [The investigators] believe that this is a kind of HIV-related suffering that has not been adequately studied or appreciated. These women need interventions to address these issues and to help them regain a sense of themselves as appealing, sensual women who can have gratifying, yet safe, relationships with both uninfected and infected partners. They would also likely benefit from guidance concerning how and in what circumstances to share their diagnosis with potential sexual partners to reduce the risks of painful rejection or to endure such rejection without personalizing it as much. (p. 448)

Tarakeshwar, Hansen, Kochman, Fox, and Sikkema (2006) "examined how **resiliency** (represented by optimism, social support, ... [religiousness], and finding growth and meaning), within the context of perceived impact of sexual trauma and HIV-related stress, was **linked to perspectives on addressing trauma** among individuals ($N = 266$) with HIV and childhood sexual abuse" (p. 449). The investigators found that "individuals who reported more HIV-related stress had more negative feelings about addressing trauma symptoms while those reporting greater perceived impact of sexual trauma reported more positive feelings about addressing their trauma issues. A principal

finding ... was that individuals who are more resilient are more likely to report positive feelings in addressing past trauma. In contrast, lower resiliency was associated with a greater likelihood of feeling negative about addressing past trauma" (p. 457). Tarakeshwar and colleagues suggest that

interventions that focus on instilling hope may be crucial in helping HIV-positive trauma survivors engage in treatment in at least three ways. First, hope and optimism may be buffers against the stress and anxiety associated with HIV infection. Second, those with more hope and optimism appear to be less avoidant Third, optimism appears to be a component of resiliency, which is related to positive feelings about addressing trauma. Other aspects of resiliency that can be encouraged in interventions include mobilizing social support, including support that could be obtained through religious/spiritual resources Finally, interventions focusing on helping participants find meaning and understanding related to traumatic experiences may be critical in promoting resiliency. (p. 458)

In their continuing longitudinal analysis of data emerging from an RCT of a **group coping intervention for AIDS-related bereavement**,⁴ Sikkema et al. (2006) examined data drawn from a diverse sample of 267 men and women living with HIV who had lost one or more loved ones over the preceding 2-year period. These individuals were randomly assigned to one of two conditions. The intervention condition consisted of a 12-week, cognitive-behavioral bereave-

ment coping group intervention conducted in 90-minute sessions and tailored to gender, ethnicity, and sexual orientation.

Six primary themes were addressed over the course of treatment, including (a) development of social support and group cohesion, (b) identification and expression of emotion, (c) identification of coping difficulties specific to AIDS loss, (d) identification of current coping strategies, (e) goal setting, and (f) implementation of adaptive coping strategies to reduce psychological distress (e.g., depression, anxiety, traumatic stress). Intervention techniques included group discussion, exercises, role-plays, and assignment of tasks to practice between sessions. This bereavement coping intervention was specifically tailored to address ... the complexity of both coping with AIDS-related loss and living with HIV. (p. 566)

The comparison condition consisted of individual psychotherapy and psychiatric services on demand (the community standard-of-care). Measures of grief and psychiatric distress were administered at baseline, 2 weeks following the intervention, and in 4-, 8-, and 12-month follow-up assessments.

Immediately following intervention, participants in the coping group intervention reported significantly greater reductions in grief and psychiatric distress than those who were provided individual psychotherapy on request (Sikkema et al., 2004). The results of the current analysis suggest that these differences in grief and psychiatric distress between participants in the intervention and comparison conditions declined over time, thereby eliminating group differences, probably because severity of grief signifi-

cantly decreased over time in both conditions. However, among individuals who reported high levels of psychiatric distress, participants who received the bereavement coping group intervention showed significantly lower levels of grief over the 1-year follow-up compared with those in the comparison condition. This finding suggests that the intervention had a beneficial impact on persons experiencing the greatest psychiatric distress, arguably the subgroup most in need of intervention. (pp. 567-568)

Speaking to the utility of these findings, Sikkema and colleagues observe that

it may be practical, particularly in areas with limited resources, to screen for elevated distress or complicated bereavement in AIDS-bereaved individuals to identify those most likely to benefit from an intervention. A counterpoint, however, based on our pre- to postintervention findings is that those attending the coping intervention will receive a short-term benefit and those who are more distressed will do better across time, even though less distressed people tend to resolve ... grief over time with or without intervention Thus, for persons with HIV seeking services for AIDS-related loss, it seems justified to provide evidence-based intervention rather than only screening for distress to determine service provision. (p. 569)

Lastly, over a period of up to 5 years, Ickovics et al. (2006) monitored 773 women living with HIV in four U.S. cities and found that

psychological resources (positive affect, positive expectancy regarding health outcomes, finding meaning in challenging circumstances) ... were inversely

⁴ Additional studies involving bereaved, HIV-positive men and women that were conducted by this research group may be found in the [Summer 2003](#), [Summer 2004](#), [Summer 2005](#), [Fall 2005](#), and [Fall 2006](#) issues of *mental health AIDS*.

associated with HIV-related mortality and time to death, beyond the effects of potential confounding variables such as clinical status (e.g., HIV viral load, symptoms, antiretroviral therapy), sociodemographic characteristics (e.g. age, race), and depression at study entry ... Psychological resources also were inversely associated with CD4+ cell count decline ..., [the latter] serving as a possible mechanism linking resources to mortality. (p. 1851)

Ickovics and colleagues conclude that "[p]sychological resources may protect against HIV-related mortality and immune system decline. Findings have implications for understanding individual variability in HIV disease progression. Moreover, because psychological resources are potentially amenable to change, results can be applied to clinical interventions aimed at improving the health of women with HIV" (p. 1851). The investigators point out, however, that

[i]t is unclear whether clinical interventions could be designed to meaningfully enhance psychological resources. Fostering psychological resources either innate or acquired may affect treatment response and promote resilience to clinical setbacks likely as HIV disease progresses. The critical question is under what conditions, for which patients, might we have the capacity to enhance psychological resources and subsequently immune alterations and ultimately longevity ...? One needs to tread carefully, however, to insure that patients with HIV do not perceive self-blame because of natural illness progression ... (p. 1858)

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Tool Box

A Note on Content

This publication has been developed to help the frontline provider of HIV-related mental health services, allied professionals, and consumers stay up-to-date on research-based developments in HIV care. The contents for the "Biopsychosocial Update" are drawn from a variety of sources including, but not limited to: the *CDC HIV/STD/TB Prevention News Update* (<http://www.cdcnpin.org/news/prevnews.htm>); the *Kaiser Daily HIV/AIDS Report* (<http://report.kff.org/hiv/aids/>); and information e-mailed by Florida International University researcher Robert M. Malow, Ph.D., ABPP. Other sources are identified when appropriate.

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It is presumed that readers have at least a fundamental understanding of medical, psychiatric, psychological, psychosocial, and spiritual considerations when assessing and intervening with people who are living with HIV/AIDS and their families. For additional background information on these aspects of care, the following resources may be of assistance:

Bartlett, J.G. (2005). *The Johns Hopkins Hospital 2005-6 guide to medical care of patients with HIV infection, 12th edition*. Philadelphia: Lippincott Williams & Wilkins.

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